



Information Bulletin

*Governor's Office of Emergency Services
Law Enforcement Branch*

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Radioactive Dispersion Device (RDD) a.k.a. "Dirty Bomb"

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Since September 11, 2001, there has been significant media and governmental attention regarding the use of radioactive material as a potential terrorist's weapon. Law Enforcement authorities and scientists have assessed the availability of radioactive material and the capability of various terrorists' organizations to obtain, construct, conceal, and deploy a device, either as a stand alone device or a more conventional explosive laced with radioactive materials. It is important here to make the distinction that a "dirty bomb" is not a nuclear weapon as used by the military. Nuclear weapons involve a complex nuclear-fission reaction and are thousands of times more devastating.

It is extremely unlikely that a terrorist would have access to, and successfully detonate, a nuclear weapon. Somewhat more likely, though not probable, is a terrorist's use of a conventional explosive containing some source of radioactivity. Such a device, called an RDD by scientists and the intelligence community, would cause a limited amount of immediate damage, but would potentially spread a measured level of radioactivity over a limited, but somewhat larger area, perhaps, causing the area to be contaminated and uninhabitable for a considerable period of time. Therefore, it is essential for law enforcement agencies to review their emergency procedures and the resources available to respond to this type of event. Furthermore, it is recommended that local public safety and health services agencies coordinate appropriate proactive measures to respond to media inquiries and public perceptions during this time of heightened sensitivity and anxiety about such issues. Even if there were a minimal dispersion of a radioactive substance, the event would generate enormous public anxiety and could result in a prolonged psychological impact.

Considering a radioactive material emergency is not a new concept to many public safety agencies throughout California. With two active and two inactive nuclear power generating stations, radioactive material in fixed facilities, including the medical and food industry, in addition to thousands of shipments of radioactive material occurring daily around the state, several agencies already have response plans in place. However, the difficulty with a radiological incident is that it is an invisible hazard that may go undetected in the initial response by law enforcement and other public safety agencies. Response to an explosion that includes radioactive material is one that would require the

combined response of local, state and federal agencies. Additionally, it would require specialized radiation detection equipment, personal protective clothing and respiratory protection.

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The time is opportune and prudent to examine your agency's capabilities and procedures to respond to a radioactive incident of this, or any other nature. The following questions may assist you in your assessment:

- What are the potential radiological scenarios that your jurisdiction may experience?
- What plan(s) does your agency and jurisdiction have to respond to this specific type of event?
- What role and responsibilities does your agency have in this type of event?
- Does your agency/jurisdiction have radiological detection and monitoring equipment? If not, who in your area does?
- With a radiological emergency in mind, what type of personal protective clothing and equipment does your agency have? If not, who in your area does?
- What other agencies in your jurisdiction have a role and responsibility in responding to a radiological incident?
- Does your agency participate in multi-agency radiological exercises and training?
- Has your agency identified external resources and how to access/request them?

The State of California and the federal government have developed radiological emergency response plans and procedure. The Office of Emergency Services has developed the "California Terrorism Response Plan – An Annex to the State Emergency Plan." The purpose of this plan is to coordinate the state response to acts of terrorism, including radiological incidents, which exceed the capability of local or operational area management.

Additionally, the Federal Bureau of Investigation has published the "Weapons of Mass Destruction Incident Contingency Plan" describing the federal role, responsibilities, and reference information to include a radiological incident. Contact your local FBI office to obtain a copy of the plan. California's Terrorism Response Plan was written to be fully compatible with this document.

As an added reference to developing and/or refining local plans, agencies may want to utilize the OES document "Local Planning Guidance on Terrorism Response." State or federal agencies that support local government through field offices may also find this a useful planning guidance. Both the state Terrorism Response Plan and the Local Planning Guidance along with other terrorism information may be obtained by accessing the OES Internet web site at www.oes.ca.gov.

In summary, the possibility of a "dirty bomb" incident is remote. An RDD is not the "mushroom cloud" catastrophic detonation. Nonetheless, law enforcement agencies need to adequately prepare for the various terrorist events; no matter how asymmetrical or improbable they may seem. In addition to useful and current plans is the need to consider effective and instructive public information and education material. Moreover, the identification of expert and trained public information personnel is a critical element of your radiological preparedness and response program.

The OES Law Enforcement Branch can assist you in your terrorism planning and response activities. To access the OES peace officer nearest you please contact the Branch headquarters' office at (916) 845-8700.